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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,585	07/11/2003	Donald Albert Paquet JR.	FA1048	3692

23906 7590 12/04/2006

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EXAMINER	
CHEUNG, WILLIAM K	
ART UNIT	**PAPER NUMBER**
1713	

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

C

Office Action Summary	Application No.	Applicant(s)	
	10/617,585	PAQUET ET AL.	
	Examiner	Art Unit	
	William K. Cheung	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) *2,4 and 22-25* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5-21 and 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In view of BPAI Decision of October 31, 2006, the rejection of Claim 5 under 35 U.S.C. 112, second paragraph, is withdrawn. Further, the rejection of claims 1-16, 18-21, 26 under 35 U.S.C. 102(b) as being anticipated by Barkae et al. (US 6,339,126 B1), is withdrawn.

2. Claims 1-26 are pending. Claims 22-25 are drawn to non-elected subject matter.

3. In view of the following new rejection the allowability of claim 17 is withdrawn.

Species Elections

3. This application contains claims directed to the following patentably distinct species of the claimed invention: Crosslinkable group species, such as hydroxyl, acetoacetoxy, carboxyl, primary amine, secondary amine, and epoxy, and crosslinking component species, such as polyisocyanate, polyamine, ketimine, melamine, epoxy, and polyacid.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, crosslinkable groups and crosslinking components are generic.

During a telephone conversation with John H. Lamming (Registration No. 34,857) on November 21, 2006, a provisional species election was made to prosecute claims 1, 3, 5-21, 26, which are related to hydroxyl group as the crosslinkable group, and polyisocyanate as the crosslinking component. Affirmation of this election must be made by applicant in replying to this Office action. Claims 2, 4 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. Claims 1, 3, 5-21, 26 are examined with merit.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 3, 5-21, 26 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 10/109,948, claims 1-10 of copending Application No. 10/120,127, and claims 1-10 of copending Application No. 10/109,947. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention of claims 1, 3, 5-21, 26 of instant application are related to claims 1-10 of copending Application No. 10/109,948, claims 1-10 of copending Application No. 10/120,127, and claims 1-10 of copending Application No. 10/109,947, as genus and its species.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1, 3, 5-21, 26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,558,745, claim 1 of U.S. Patent No. 6,562,893, and claim 1 of U.S. Patent No. 6,551,712. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention of claims 1, 3, 5-21, 26 of instant application are related to claims 1-10 of copending Application No. 10/109,948, claims 1-10 of copending Application No. 10/120,127, and claims 1-10 of copending Application No. 10/109,947, as genus and its species.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3, 5-11, 13-21, 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Rink et al. (US 6,013,739).

The invention of claims 1, 3, 5-21 relates to a ***coating composition*** *comprising* ***crosslinkable and crosslinking components,***

wherein said ***crosslinkable component*** *comprises:* ***a copolymer*** *having on an average* ***2 to 25 crosslinkable groups*** *selected from the group consisting of* ***hydroxyl, acetoacetoxy, carboxyl, primary amine, secondary amine, epoxy*** *and a combination thereof; a weight average molecular weight ranging from about* ***1000 to 4500****; a polydispersity ranging from about* ***1.05 to 2.5****;*

wherein said ***copolymer*** *is polymerized from a monomer mixture comprising one or more* ***non-functional acrylate*** *monomers and one or more* ***functional methacrylate*** *monomers provided with said functional groups, and*

*wherein **said crosslinking component** for said crosslinkable groups is selected from the group consisting of **polyisocyanate**, **polyamine**, **ketimine**, **melamine**, **epoxy**, **polyacid** and a combination thereof.*

*The invention of claim 26 relates to a **coating composition** comprising **crosslinkable** and **crosslinking components**,*

*wherein said **crosslinkable component** comprises: **a copolymer** having on an average **2 to 25 crosslinkable groups** selected from the group consisting of **hydroxyl**, **acetoacetoxy**, **primary amine**, **secondary amine**, and a combination thereof; a weight average molecular weight ranging from about **1000 to 4500**; a polydispersity ranging from about **1.05 to 2.5**;*

*wherein said **copolymer** is polymerized from a monomer mixture comprising one or more **non-functional acrylate** monomers and one or more **functional methacrylate** monomers provided with said functional groups, and*

*wherein said **crosslinking component** for said crosslinkable groups is selected from the group consisting of **polyisocyanate**, **ketimine**, **melamine**, and a combination thereof.*

Rink et al. (col. 18-19, claim 1, col. 9, line 29-41) claim a coating composition comprising copolymers containing hydroxyl groups as a crosslinkable component as claimed, and polyiscyanate as a crosslinking component. Rink et al. (col. 9, line 29-41) clearly disclose the molecular weight and polydispersity properties as claimed.

Regarding the processing related limitations of claims 17 and 18, they do not carry much weight in the patentability of the claimed coating composition unless applicants can provide proof that the claimed processing related limitations would impart unique features onto the claimed coating compositions.

Regarding the VOC limitation of claim 7, in view of the substantially identical composition as claimed and the composition as disclosed in Rink et al., the examiner has a reasonable basis that the claimed VOC properties are inherently possessed in Rink et al.

In view of the reasons set forth above, Claims 1, 3, 5-11, 13-21, 26 are anticipated.

9. Claims 1, 3, 5-21, 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Yahkind et al. (US 6,753,386).

Yahkind et al. (abstract; col. 8, line 52 to col. 12, line 29) disclose a film forming composition comprising polyols and and polyisocyanates. Although Yahkind et al. do not explicitly teach the use of polyols based on polyacrylates, Yahkind et al. (col. 20, line 66 to col. 21, line 14) clearly disclose the use of polyacrylate copolymer comprising

acrylate monomers containing hydroxyl functionalities, and non-functional acrylate monomers, and possess the molecular weight and polydispersity as claimed.

Regarding the processing related limitations of claims 17 and 18, they do not carry much weight in the patentability of the claimed coating composition unless applicants can provide proof that the claimed processing related limitations would impart unique features onto the claimed coating compositions.

Regarding the VOC limitation of claim 7, in view of the substantially identical composition as claimed and the composition as disclosed in Yahkind et al., the examiner has a reasonable basis that the claimed VOC properties are inherently possessed in Rink et al.

In view of the reasons set forth above, Claims 1, 3, 5-11, 13-21, 26 are anticipated.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rink et al. (US 6,013,739) in view of Roesler et al. (US 2003/0232942 A1).

Rink et al. (col. 18-19, claim 1, col. 9, line 29-41) claim a coating composition comprising copolymers containing hydroxyl groups as a crosslinkable component as claimed, and polyiscyanate as a crosslinking component. Rink et al. (col. 9, line 29-41) clearly disclose the molecular weight and polydispersity properties as claimed.

The difference between the invention of claim 12 and Rink et al. is that Rink et al. are silent on a coating composition comprising isocyanatopropyl trimethoxy silane.

Roesler et al. (abstract; 0061) disclose polyurethane coating compositions that are very similar to the polyurethane coating compositions of Rink et al., in that both disclose the use of polyols, and polyisocyanates for preparing polyurethane based coating compositions. In view that both Roesler et al. and Rink et al. are in the field of

endeavors of developing novel polyurethane coating compositions, it would have been obvious to one of ordinary skill in art to incorporate the isocyanatopropyl trimethoxy silane teaching of Roesler et al. (page 5, 0067) into composition teachings in Roesler et al. to obtain the invention of claim 12, motivated by the expectation of success of developing a coating system that is moisture curable (page 1, 0001; page 5, 0069-0074).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William K. Cheung, Ph. D.

Primary Examiner

WILLIAM K. CHEUNG
PRIMARY EXAMINER

November 27, 2006